ABSTRACT

An apparatus and method is provided for stenting bifurcated vessels. A proximal angled stent is configured for implanting in a side-branch vessel wherein the proximal angled stent has an angulated portion that corresponds to the angle formed by the intersection of the side-branch vessel and the main vessel so that all portions of the side-branch vessel at the bifurcation are covered by the proximal angled stent. A main-vessel stent is provided for implanting in the main vessel, wherein the main-vessel stent has an aperture or stent cell that aligns with the opening to the side-branch vessel to permit unobstructed blood flow between the main vessel and the side-branch vessel. Side-branch and main-vessel catheter assemblies are advanced over a pair of guide wires for delivering, appropriately orienting, and implanting the proximal angled stent and the apertured stent.